

METHODS OF TREATING DISEASES RESPONSIVE TO INDUCTION OF APOPTOSIS AND SCREENING ASSAYS

ABSTRACT OF THE DISCLOSURE

The present invention pertains to a method of treating, preventing or ameliorating a disease responsive to induction of the caspase cascade in an animal, comprising administering to the animal a compound which binds specifically to a Tail Interacting Protein Related Apoptosis Inducing Protein (TIPRAIP). The present invention also relates to screening methods useful for drug discovery of apoptosis inducing compounds. In particular, the screening methodology relates to using TIPRAIP as a target for the discovery of apoptosis activators useful as anticancer agents. The screening methods of the present invention can employ homogenous or heterogenous binding assays using purified or partially purified TIPRAIP; or whole cell assays using cells with altered levels of TIPRAIP. The invention also contemplates use of 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole or a substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole which bind TIPRAIP and can accordingly be used to raise antibodies useful for drug discovery. Alternatively, labeled 3-(4-azidophenyl)-5-(3-chloro-thiophen-2-yl)-[1,2,4]-oxadiazole (or a labeled substituted 3-aryl-5-aryl-[1,2,4]-oxadiazole) is used for competitive binding assays for drug discovery. Such assays afford high throughput screening of chemical libraries for apoptosis activators.

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